2005 NAIP Survey
Executive Summary
For
South Dakota

USDA
Farm Service Agency

Aerial Photography Field Office

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Contents

Section 1

1.0 Introduction

The primary purpose of NAIP is to acquire peak growing season "leaf on" imagery, and deliver this imagery to United States Department of Agriculture (USDA) County Service Centers in order to maintain Common Land Unit (CLU) boundaries and assist with crop compliance and a multitude of other farm programs.

As evidenced by the types of customers requesting NAIP imagery, the imagery has other purposes as well. Although our primary customers are States and County Service Centers, other uses for NAIP imagery, including military, real estate, recreation, planning, etc., cannot be overlooked.

NAIP is a program with a relatively short history, beginning with pilot projects in 2001 and 2002, and moving to full volume acquisition in 2003 to 2005, based on funding and partnering. NAIP is moving out of the research and development phase and into sustainment status. By moving into a sustainment phase, a program can build and evaluate a quality business process, and stabilize. Part of this process is evaluating how NAIP is working for its primary customers.

1.1 Purpose and Scope

The focus of this document is to assess in a qualitative manner how NAIP is satisfying customer needs in South Dakota. In other words, "How did APFO do in providing *useful* NAIP imagery for its primary customer?" Answering this question comprises the purpose and scope.

1.2 Survey Submittals

For the initial disposition, the following States were sent surveys to disseminate to County Service Centers for completion: WA, OR, OK, KS, NE, MO, IA, MN, WI, IL, IN, OH, CT, and NC. No responses were received from KS or AZ by the 15 Dec 2005 due date. WA noted that they would respond to the survey, but due to imagery delivery/redelivery dates, responses would likely be after 15 Dec.

A second waive of surveys was sent to the following States to disseminate to County Service Centers for completion: CA, CO, MT, ND, **SD**, TX, LA, MS, AL, GA, FL, SC, VA, MD, PA, MI, RI, and CT. Responses were requested by 17 Feb, and by 9 Mar for select states which received imagery "late". Surveys were accidentally sent to CT twice, however, County Service Centers only responded once. LA noted that they would only be able to get a few Counties to complete the survey by the 9 Mar due date. MI noted they would not be able to participate in the survey because of CIR rework that would be completed after the survey due date. MT noted that due to the late distribution of imagery, surveys would likely be returned after the 9 Mar due date. During the second waive of surveys, no survey responses were received by CO, GA, MI, or AL. Surveys received after 9 Mar 06 were not scored.

Section 2

2.0 Qualitative Evaluation Summary

NAIP Assessment Surveys were provided by email to County Service Centers via the State Office and responses were requested by 17 Feb 06. Out of the responses received, in South Dakota, 2290 of a possible 2660 points were achieved, for a weighted average score out of 1.0 of .861, for a rating of 86.1%. Translated into survey terms, this is an overall rating of "Satisfied". The map on the following page graphically represents overall survey results by county. These results indicate that generally the counties that participated in the survey were satisfied with 2005 NAIP and that the products met customer needs most of the time. However, there is room for improvement.

Most textual comments from the survey revolved around color quality/resolution, and timing of imagery acquisition and delivery. Textual comments can be found in the Executive Summary Supplementals 1 and 2. A statistical summary by question of survey results is shown below. Note that Q1-8 are out of a possible 5 points and Q9-10 are out of a possible 10 points. Statistically, the lowest average scoring question was Q1, "Was the imagery received by your office in time to be useful for crop compliance work?" Statistically, the highest scoring question was Q8, "Is the imagery useful for historical purposes, including prior year crop disaster measurements, or any other purpose where comparing older imagery to newer, or historical change detection is of importance?"

Q1		*Q2*		*Q3*		*Q4*		*Q5*	
Mean	4	Mean	4.145833333	Mean	4.488888889	Mean	4.5625	Mean	4.4375
Standard Error	0.157552198	Standard Error	0.119059492	Standard Error	0.103583384	Standard Error	0.093713054	Standard Error	0.12650306
Median	4	Median	4	Median	5	Median	5	Median	5
Mode	5	Mode	4	Mode	5	Mode	5	Mode	5
Standard Deviation	1.091553646	Standard Deviation	0.824868354	Standard Deviation	0.694858462	Standard Deviation	0.649263085	Standard Deviation	0.715609373
Sample Variance	1.191489362	Sample Variance	0.680407801	Sample Variance	0.482828283	Sample Variance	0.421542553	Sample Variance	0.512096774
Kurtosis	0.817391304	Kurtosis	0.143844357	Kurtosis	-0.181492677	Kurtosis	0.373714796	Kurtosis	-0.439860521
Skewness	-1.126663512	Skewness	-0.757125789	Skewness	-1.022047087	Skewness	-1.214886087	Skewness	-0.893462416
Range	4	Range	3	Range	2	Range	2	Range	2
Minimum	1	Minimum	2	Minimum	3	Minimum	3	Minimum	3
Maximum	5	Maximum	5	Maximum	5	Maximum	5	Maximum	5
Sum	192	Sum	199	Sum	202	Sum	219	Sum	142
Count	48	Count	48	Count	45	Count	48	Count	32

Q6		*Q7*		*Q8*		*Q9_X2*		*Q10_X2*	
Mean	4.545454545	Mean	4.483870968	Mean	4.568181818	Mean	8.5	Mean	8.255319149
Standard Error	0.09453651	Standard Error	0.130103084	Standard Error	0.094218311	Standard Error	0.241889723	Standard Error	0.276204092
Median	5	Median	5	Median	5	Median	8	Median	8
Mode	5	Mode	5	Mode	5	Mode	10	Mode	10
Standard Deviation	0.627084263	Standard Deviation	0.724383312	Standard Deviation	0.624973572	Standard Deviation	1.675861163	Standard Deviation	1.893559853
Sample Variance	0.393234672	Sample Variance	0.524731183	Sample Variance	0.390591966	Sample Variance	2.808510638	Sample Variance	3.585568918
Kurtosis	0.151774611	Kurtosis	-0.192682194	Kurtosis	0.366831623	Kurtosis	-0.507398092	Kurtosis	1.645628945
Skewness	-1.068020525	Skewness	-1.065212813	Skewness	-1.167650378	Skewness	-0.735861423	Skewness	-1.227705265
Range	2	Range	2	Range	2	Range	6	Range	8
Minimum	3	Minimum	3	Minimum	3	Minimum	4	Minimum	2
Maximum	5	Maximum	5	Maximum	5	Maximum	10	Maximum	10
Sum	200	Sum	139	Sum	201	Sum	408	Sum	388
Count	44	Count	31	Count	44	Count	48	Count	47

2005 NAIP - Overall Qualitative Survey Results